I. AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-37. (Canceled)

38. (Currently amended) A method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising:

(a) administering ~~an exogenous gonadotropin~~ a combination of luteinizing hormone (LH) and follicle stimulating hormone (FSH) to induce follicle growth, and

(b) administering a luteinizing hormone releasing hormone (LHRH) antagonist selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, D23980, and D-24824, to prevent a premature LH surge, wherein the LHRH antagonist is administered in a single or dual dosage regimen of ~~1 to 10~~ 3 mg per dose beginning on menstruation cycle day 1 to 10;

wherein follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

39. (Currently amended) The method of claim 38, wherein ~~the dosage of LHRH antagonist is in the range of 2-6 mg per dose~~ step (a) comprises administering human menopausal gonadotropin (HMG) to induce follicle growth.

40-41. (Canceled)

42. (Previously Presented) The method of claim 38, wherein the LHRH antagonist is administered by subcutaneous injection.

43. (Canceled)

44. (Currently Amended) The method of claim 38, wherein the LHRH antagonist is administered starting on cycle day 4 to 8.

45. (Previously Presented) The method of claim 38, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

46. (Previously Presented) The method of claim 38, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

47. (Previously Presented) The method of claim 38, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

48. (Previously Presented) The method of claim 38, wherein ovulation is induced by administering a hormone or hormone agonist in order to induce ovulation.

49. (Previously Presented) The method of claim 38, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

50. (Previously Presented) The method of claim 38, wherein the LHRH antagonist is Cetrorelix.

51. (Currently Amended) A method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

(a) administering human menopausal gonadotropin (HMG) to induce follicle growth, and

(b) administering Cetrorelix to prevent a premature LH surge, wherein Cetrorelix is administered in a single or dual dosage regimen of ~~1 to 10~~ 3 mg per dose beginning on menstruation cycle day 1 to 10;

wherein follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the Cetrorelix is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

52-55. (Canceled)

56. (Currently Amended) The method of claim 51, wherein the Cetrorelix is administered starting on cycle day 4 to 8.

57. (Previously Presented) The method of claim 51, wherein Cetrorelix is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

58. (Previously Presented) The method of claim 51, wherein ovulation occurs within 6.5 days following administration of a single or second dose of Cetrorelix.

59. (Previously Presented) The method of claim 51, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

60. (Previously Presented) The method of claim 51, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

61. (Currently Amended) ~~An improved~~ A method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

(a) administering ~~an exogenous gonadotropin~~ a combination of luteinizing hormone (LH) and follicle stimulating hormone (FSH) to induce follicle growth; and

(b) administering an LHRH antagonist selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, D-

23980, and D-24824 to prevent a premature LH surge;

wherein ~~the improvement comprises administering~~ the LHRH antagonist is administered in a single or dual dosage regimen of 1 to 10 mg per dose beginning on menstruation cycle day 1 to 10[,];

wherein ~~the~~ follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs normally between day 9 and 20 of the menstruation cycle without the administration of a hormone or hormone agonist to induce ovulation, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

62. (Currently Amended) The ~~improved~~ method of claim 61, wherein the dosage of LHRH antagonist is in the range of 2-6 mg per dose.

63. (Currently Amended) The ~~improved~~ method of claim 61, wherein the dosage of LHRH antagonist is 3 mg per dose.

64. (Canceled)

65. (Currently Amended) The ~~improved~~ method of claim 61, wherein the LHRH antagonist is administered by subcutaneous injection.

66. (Canceled)

67. (Currently Amended) The ~~improved~~ method of claim 61, wherein the LHRH antagonist is administered starting on cycle day 4 to 8.

68. (Currently Amended) The ~~improved~~ method of claim 61, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

69. (Currently Amended) The ~~improved~~ method of claim 61, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

70. (Currently Amended) The ~~improved~~ method of claim 61, wherein ~~ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation~~ step (a) comprises administering human menopausal gonadotropin (HMG) to induce follicle growth.

71. (Canceled)

72. (Currently Amended) The ~~improved~~ method of claim 61, wherein the LHRH antagonist is Cetrorelix.

73. (Currently Amended) ~~The improved method of claim 61 further comprising:~~

~~(a) administering human menopausal gonadotropin (HMG) to induce follicle growth; and~~

~~(b) administering Cetrorelix to prevent a premature LH surge;~~

~~wherein the improvement comprises subcutaneously administering Cetrorelix in a single or dual dosage regimen of 1 to 10 mg per dose beginning on menstruation cycle day 1 to 10;~~

~~wherein ovulation occurs between day 9 and 20 of the menstruation cycle, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected~~

The method of claim 70, wherein the LHRH antagonist is Cetrorelix.

74. (Currently Amended) The ~~improved~~ method of claim 73, wherein the dosage of Cetrorelix is in the range of 2-6 mg per dose.

75. (Currently Amended) The ~~improved~~ method of claim 73, wherein the dosage of LHRH antagonist is 3 mg per dose.

76-77. (Canceled)

78. (Currently Amended) The ~~improved~~ method of claim 73, wherein the LHRH antagonist is administered starting on cycle day 4 to 8.

79. (Currently Amended) The ~~improved~~ method of claim 73, wherein Cetrorelix is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

80. (Currently Amended) The ~~improved~~ method of claim 73, wherein ovulation occurs within 6.5 days following administration of a single or second dose of Cetrorelix.

81-82. (Canceled)

83. (Currently Amended) A method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising

(a) administering ~~an exogenous gonadotropin~~ a combination of luteinizing hormone (LH) and follicle stimulating hormone (FSH) to induce follicle growth,

(b) administering ~~a luteinizing hormone releasing hormone (LHRH)~~ an LHRH antagonist selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, D-23980, and D-24824 to prevent a premature LH surge, wherein the LHRH antagonist is administered in a dosage regimen of daily doses of 0.25 mg/day for multiple days,

wherein the LHRH antagonist is administered daily beginning on menstruation cycle day 1 to 10, wherein the follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

84. (Previously Presented) The method of claim 83, wherein the LHRH antagonist is administered by subcutaneous injection.

85. (Canceled)

86. (Currently Amended) The method of claim 83, wherein the LHRH antagonist is administered starting cycle on day 4 to 8.

87. (Previously Presented) The method of claim 83, wherein a daily dose of the LHRH antagonist is administered for 3 to 14 days.

88. (Previously Presented) The method of claim 83, wherein a daily dose of the LHRH antagonist is administered for 3 to 7 days.

89. (Previously Presented) The method of claim 83, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

90. (Previously Presented) The method of claim 83, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

91. (Previously Presented) The method of claim 83, wherein the LHRH antagonist is Cetrorelix.

92. (Previously Presented) A method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

(a) administering human menopausal gonadotropin (HMG) to induce follicle growth, and;

(b) administering Cetrorelix to prevent a premature LH surge, wherein Cetrorelix is subcutaneously administered in a dosage regimen of daily doses of 0.25 mg per day for multiple days;

wherein follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the Cetrorelix is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

93. (Canceled)

94. (Currently Amended) The method of claim 92, wherein Cetrorelix is administered starting <u>on</u> cycle day 4 to 8.

95. (Previously Presented) The method of claim 92, wherein a daily dose of Cetrorelix is administered for 3 to 14 days.

96. (Previously Presented) The method of claim 92, wherein a daily dose of Cetrorelix is administered for 3 to 7 days.

97. (Previously Presented) The method of claim 92, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

98. (Previously Presented) The method of claim 92, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

99. (Currently Amended) ~~An improved~~ A method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising

(a) administering ~~an exogenous gonadotropin~~ a combination of luteinizing hormone (LH) and follicle stimulating hormone (FSH) to induce follicle growth; and

(b) administering ~~a luteinizing hormone releasing hormone (LHRH)~~ an LHRH antagonist selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, D-23980, and D-24824 to prevent a premature LH surge, wherein the ~~improvement comprises administering the~~ LHRH antagonist is administered in a dosage regimen of daily doses of from 0.25 to 0.5 mg per day for multiple days[,];

wherein ~~the~~ follicular growth occurs in the absence of a LH surge, a fertilizable oocyte is produced, ovulation occurs normally between day 9 and 20 of the menstruation cycle without the administration of a hormone or hormone agonist to induce ovulation, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

100. (Currently Amended) The ~~improved~~ method of claim 99, wherein the LHRH antagonist is administered by subcutaneous injection.

101. (Canceled)

102. (Currently Amended) The ~~improved~~ method of claim 99, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

103. (Currently Amended) The ~~improved~~ method of claim 99, wherein a daily dose of the LHRH antagonist is administered for 3 to 14 days.

104. (Currently Amended) The ~~improved~~ method of claim 99, wherein a daily dose of the LHRH antagonist is administered for 3 to 7 days.

105. (Currently Amended) The ~~improved~~ method of claim 99, wherein ~~ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation~~ step (a) comprises administering human menopausal gonadotropin (HMG) to induce follicle growth.

106. (Canceled)

107. (Currently Amended) The ~~improved~~ method of claim 99, wherein the LHRH antagonist is Cetrorelix.

108. (Currently Amended) ~~The improved method of claim 99, comprising:~~

~~(a) administering human menopausal gonadotropin (HMG) to induce follicle growth, and~~

~~(b) administering Cetrorelix to prevent a premature LH surge;~~

~~wherein the improvement comprises subcutaneously administering Cetrorelix in a dosage regimen of daily doses of 0.25 mg per day for multiple days;~~

~~wherein follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the Cetrorelix is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected~~

The method of claim 105, wherein the LHRH antagonist is Cetrorelix..

109. (Canceled)

110. (Currently Amended) The ~~improved~~ method of claim 108, wherein Cetrorelix is administered starting on cycle day 4 to 8.

111. (Currently Amended) The ~~improved~~ method of claim 108, wherein a daily dose of Cetrorelix is administered for 3 to 14 days.

112. (Currently Amended) The ~~improved~~ method of claim 108, wherein a daily dose of Cetrorelix is administered for 3 to 7 days.

113. (Currently Amended) The ~~improved~~ method of claim 108, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

114. (Currently Amended) The ~~improved~~ method of claim 108, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, and recombinant LH.

115. (Currently Amended) A method for obtaining the production of a fertilizable oocyte within a program of assisted reproduction techniques comprising:

(a) allowing normal follicular growth and development to proceed in the absence of stimulation by an exogenous gonadotropin;

(b) administering ~~a luteinizing hormone releasing hormone (LHRH)~~ an LHRH antagonist selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, D-23980, and D-24824, in a ~~single or dual~~ dosage regimen that prevents a premature LH surge, beginning on menstruation cycle day 1 to 10;

wherein follicular growth and development proceeds in the absence of a LH surge and a fertilizable oocyte is produced, ovulation occurs between day 9 and 20 of the menstruation cycle, and the LHRH antagonist is sufficient to suppress LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

116. (Previously Presented) The method of claim 115, wherein the LHRH antagonist is administered by subcutaneous injection.

117. (Canceled)

118. (Currently Amended) The method of claim 115, wherein the LHRH antagonist is administered starting on cycle day 4 to 8.

119. (Currently Amended) The method of claim 115, wherein the ~~LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9 to 16 of the menstruation cycle~~ method is performed on a patient in whom follicular growth is inadequate due to previous treatment with an LHRH antagonist, and step (a) comprises allowing normal follicular growth and development to proceed in the absence of treatment of the patient with an LHRH antagonist and in the absence of stimulation by an exogenous gonadotropin.

120. (Canceled)

121. (Previously Presented) The method of claim 115, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

122. (Previously Presented) The method of claim 115, wherein ovulation is induced by administering a hormone or hormone agonist in order to induce ovulation.

123. (Previously Presented) The method of claim 115, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

124-125. (Canceled)

126. (Currently Amended) The method of claim ~~124~~ 115, wherein the LHRH antagonist is Cetrorelix.

127. (Previously Presented) The method of claim 115, wherein a fertilizable oocyte is produced within a program of extracorporeal fertilization by sperm injection.

128. (Previously Presented) The method of claim 115, wherein a fertilizable oocyte is produced within a program of extracorporeal fertilization by *in vitro* fertilization.

129. (New) The method of claim 115, wherein the LHRH antagonist is administered in a single or dual dosage regimen of 1 to 10 mg per dose.

130. (New) The method of claim 129, wherein the dosage of LHRH antagonist is in the range of 2-6 mg per dose.

131. (New) The method of claim 129, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9 to 16 of the menstruation cycle.

132. (New) The method of claim 129, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

133. (New) The method of claim 129, wherein the LHRH antagonist is Cetrorelix.

134. (New) The method of claim 115, wherein the LHRH antagonist is administered in a dosage regimen of daily doses of from 0.25 to 0.5 mg/day for multiple days.

135. (New) The method of claim 134, wherein a daily dose of the LHRH antagonist is administered for 3 to 14 days.

136. (New) The method of claim 134, wherein a daily dose of the LHRH antagonist is administered for 3 to 7 days.

137. (New) The method of claim 135, wherein the LHRH antagonist is Cetrorelix.

138. (New) The method of claim 137, wherein the daily dose of Cetrorelix is 0.25 mg/day or 0.5 mg/day.

139. (New) The method of claim 83, wherein step (a) comprises administering human menopausal gonadotropin (HMG) to induce follicle growth.

140. (New) The method of claim 99, wherein the LHRH antagonist is Cetrorelix and the daily dose is 0.25 mg/day or 0.5 mg/day.

141. (New) The method of claim 108, wherein the daily dose of Cetrorelix is 0.25 mg/day or 0.5 mg/day.